

## **REMARKS**

Claims 1-5 are now present in the application. Claims 1 and 4 have been amended and are independent. Reconsideration of this application, as amended, is respectfully requested.

### **Reasons for an Entry of Amendments**

It is respectfully requested that the present amendments be entered into the official file in view of the fact that the amendments to the claims automatically place the application into condition for allowance.

In the alternative, if the Examiner does not believe the application is in condition for allowance, Applicant respectfully requests that the present amendments be entered for the purposes of Appeal. Applicant respectfully submits that the amendments to the claims simplify the issues on Appeal by further defining the present invention over the references relied on by the Examiner.

### **Status of the Drawings**

In the Examiner's Office Action dated October 11, 2001 and April 16, 2002, no indication as to the status of the drawings has been provided. As the Examiner will note, the present application was filed two (2) sheets of formal drawings, as indicated on the transmittal dated July 25, 2000. Accordingly, the Draftsperson should have reviewed the drawings for formal matters.

In view of the above, it is respectfully requested that the Examiner provide an indication as to the status of the drawings in the next Office Communication or forward a Notice of Draftsperson's Patent Drawing Review, PTO-948 so that Applicant can make any necessary drawing corrections in a timely manner.

**Rejection Under 35 U.S.C. § 112**

Claim 1 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. This rejection is respectfully traversed.

The Examiner asserts that claim 1 is indefinite since the phrase "5-80" is unclear as to how the difference in hardness is measured. For the purposes of examination, the Examiner assumed that the hardness is measured by JIS-C.

As the Examiner will note, claims 1 and 4 have been amended to recite that the difference in the hardness is "measured by JIS-C." Accordingly, Applicant respectfully submits that claims 1 and 4 are definite and clear. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph are therefore respectfully requested.

**Rejection Under 35 U.S.C. § 103**

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kataoka et al., USPN 5,533,282 in view of Wideman et al., USPN 5,922,792 and Norton, USPN 4,559,724. This rejection is respectfully traversed.

The Examiner asserts that Kataoka et al. discloses all of the elements of independent claims 1 and 4 except for the specific synthetic resin which is used for the spike. Specifically, the Examiner asserts that the spike and the plate to which it is attached comprise synthetic resin. Referring to page 5, lines 6-10 of the Examiner's Office Action, the Examiner provides arguments regarding why the Examiner considers the Kataoka et al. reference to disclose a spike made of the same material as the hard plate of the insole. Applicant respectfully submits that the Examiner's understanding of Kataoka et al. is incorrect. The Examiner once again refers to column 1, lines 12-22 of Kataoka et al. for the Examiner's position as well as column 3, lines 51-58 of Kataoka et al. to teach that the hard plate is made of synthetic resin. Although Applicant does not disagree with the Examiner with regard to Kataoka et al. teaching the hard plate made of synthetic resin, Applicant respectfully submits that Kataoka et al. does not disclose a spike made of the same material as the hard plate. Referring to column 1, lines 12-22 of Kataoka et al., it is stated "spike attaching portions 30 are projected and formed by the same material as the surface 20a as a reference face." The spike attaching portions 30 are not the same as the spikes 9 themselves. Referring to Fig. 1 of Kataoka et al., it can be clearly understood that the spike attaching

portions 30 are a part of the hard plate 20. However, the material that the spike attaching portions 30 are made of has absolutely nothing to do with the material that the spikes 9 themselves are made of.

In view of the above, Applicant respectfully submits that the Kataoka et al. reference fails to disclose spikes 9 being made of the same material as the hard plate 20 and therefore Kataoka et al. fails to disclose making spikes 9 of a synthetic resin material.

In view of the above, Applicant respectfully submits that the Examiner's modification of the Kataoka et al. reference is improper. The Examiner relies on Wideman et al. to teach the specific synthetic resin. The synthetic resin in Wideman et al. is not a hard material as is the hard plate 2 of Kataoka et al. Since there is no indication in Kataoka et al. that the spikes 9 are made from a synthetic resin material, and in particular a soft synthetic material, Applicant respectfully submits that one having ordinary skill in the art would not be motivated to modify the Kataoka et al. spike in view of the Wideman et al. teaching as asserted by the Examiner.

Specifically, since the shoe of Kataoka et al. is used for track and field events, Applicant respectfully submits that it is very likely that the spikes 9 are made of a very hard material such as metal, ceramic or a hard synthetic resin material. Since the synthetic resin material of Wideman et al. is a soft material, one having ordinary skill in the art would not be motivated to use the material of Wideman et al. to construct the spike 9 of Kataoka et al. Referring to column 8,

lines 21-31 of Wideman et al., for example, the material of Wideman et al. is used to form tires, belts, hoses, etc. Referring to claim 9 of Wideman et al. it is also indicated that rubber shoe heels and soles can be constructed of this material. Although this is more related to the Kataoka et al. invention, it clearly indicates that the material is used only for "rubber" shoe heels and soles and therefore the material is clearly a soft material which would be much softer than the spikes 9 of Kataoka et al.

In view of the above, Applicant respectfully submits that the modification proposed by the Examiner is unreasonable. The Examiner has provided absolutely no suggestion to provide soft spikes in the Kataoka et al. shoe. Accordingly, the Examiner's rejection should be withdrawn.

Referring to page 5, third full paragraph of the Examiner's Office Action, the Examiner's argument is based upon the fact that Kataoka et al. discloses the use of a synthetic resin for the spikes. In view of the above comments, Applicant respectfully submits that Kataoka et al. in fact does not teach spikes being made of a synthetic resin material. Accordingly, Applicant reiterates the fact that Kataoka et al. fails to teach or suggest the use of a synthetic resin material for the spikes 9, and in particular, the use of a soft synthetic resin material in view of the Wideman et al. reference.

It should also be noted that the Examiner relies on the Norton reference for the teaching that spikes of a shoe sole are known to be formed from a synthetic resin having a lower hardness than a remainder of the sole. Applicant

respectfully submits that Norton does not teach what the Examiner indicates is being taught. The cleats of Norton are not spikes. The cleats of Norton would be equivalent to the ground contact portions 11 of the present invention and the spike attaching portions 30 which include projecting portions 40 formed integrally therewith (See Fig. 1 of Kataoka et al.). This can be clearly understood due to the fact that Norton also discloses removable spikes which appear to be made up of a metal material. The spikes are attached to spikes fasteners 48A-48F. In order for Norton et al. to disclose what the Examiner asserts is disclosed by Norton, it would be necessary for the spikes which would be attachable to the spike fasteners 48A-48F to be made of a synthetic resin material. Since the Norton reference fails to disclose spikes made of a synthetic resin material, Applicant respectfully submits that the Norton reference fails to make up for the deficiencies of Kataoka et al. and Wideman et al.

With regard to the Wideman et al. references itself, to the extent that the Examiner's modification of the Kataoka et al. reference is proper, a fact which Applicant does not agree with, Applicant respectfully submits that the material of Wideman et al. fails to teach a JIS-C hardness in the range of from 35-95 as recited by the independent claims of the present invention. The Examiner recognizes that Wideman et al. teaches a hardness of 50.5 shore hardness. Applicant respectfully submits that the shore hardness of 50.5 is outside the range of hardness recited in the independent claims of the present invention. A JIS-C hardness of from 35-95 is converted to shore hardness of from 70-100.

Namely, a hardness of 50.5 (shore hardness; column 10, lines 25-48 in Wideman et al.) is not within the range of 35-90 JIS-C hardness. It would be necessary for Wideman et al. teach a shore hardness of from 70-100 in order to be within the claimed range.

In view of the above, neither the Kataoka et al. or Wideman et al. references teach the hardness recited in the independent claims of the present invention. Accordingly, the Examiner's rejection under 35 U.S.C. § 103 is improper and should be withdrawn.

Referring to page 5, last paragraph of the Examiner's Office Action, the Examiner states "the claimed range of hardness would be readily determined through routine optimization by one having ordinary skill in the art depending on the desire and use of the product." Applicant respectfully submit that the Examiner has not established a *prima facie* case of obviousness in the present case. In order to establish a *prima facie* case of obviousness, the Examiner must set forth some rationale or suggestion of why it would be obvious to modify a reference in a particular manner. In the present case, the Examiner has provided absolutely no reason to modify the Kataoka et al. reference in the manner asserted by the Examiner. Accordingly, the Examiner's rejection is improper and should be withdrawn.

As mentioned above, Applicant respectfully submits that one having ordinary skill in the art would not be motivated to modify the Kataoka et al. reference in view of the Wideman et al. reference, since the Wideman et al.

reference teaches a very soft material, while Kataoka et al. teaches very hard material. Since there is no teaching provided by the Examiner to provide Kataoka et al. with a soft spike, one having ordinary skill in the art would not modify the Kataoka et al. shoe as proposed. The Examiner cites the *In re Boesch and Slaney* case for the proposition that it would have been obvious to vary the hardness since the hardness would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Wideman et al. The Examiner's reliance on this case is not applicable in the present situation. The Examiner still relies on the Wideman et al. reference as a teaching to construct the spikes of Kataoka et al. having a hardness within the range recited in the independent claims of the present invention. However, since Kataoka et al. does not disclose a spike made up of a synthetic resin material and the Wideman et al. reference does not disclose a hardness within the range recited in the independent claims of the present invention, the Examiner has not established a *prima facie* case of obviousness. Specifically, Wideman et al. discloses a hardness outside of the claimed range. In view of this, any modification of the combination of Kataoka et al. and Wideman et al. would be contrary to the teachings of Wideman et al. and therefore non-obvious.

In addition, independent claims 1 and 4 recite "a difference (C1-C2) between a hardness C1 of the ground contact portion of the spike and a hardness C2 of the projected portion is in the range from 5-80." Applicant



respectfully submits that the references relied on by the Examiner also fail to teach or suggest this aspect of the present invention.

Referring to page 13, last paragraph through page 14, first paragraph of the present specification, setting the difference in hardness in the range from 5-80 is advantageous in order to prevent the golfer's foot from slipping on grass and hard ground and to prevent the spike from wearing and chipping. Since the references relied on by the Examiner fail to teach this aspect of the present invention, it is respectfully submitted that the Examiner's rejection is improper and should be withdrawn for this reason as well.

Referring to the Examiner's Office Action at page 4, second full paragraph, the Examiner also indicates that routine optimization would be used to arrive at the present invention. Applicant respectfully submits that the Examiner has also not established a *prima facie* case of obviousness with regard to this modification of the Kataoka et al. reference as well. The hardness difference disclosed by Norton is not within the range recited by the independent claims. Therefore, Norton teaches away from the claimed invention.

Finally, as the Examiner will note, independent claims 1 and 4 have been amended to recite "a plurality of spikes located on the heel portion and the forefoot portion of said sole, each of said plurality of spikes including a disk shaped portion and a plurality of pins." Applicant respectfully submits that the Kataoka et al. reference fails to disclose this aspect of the present invention as well. Referring to Fig. 2 of Kataoka et al., although spikes 9 are provided on the

toe portion, there are no spikes provided on the heel portion. In addition, since the shoe of a Kataoka et al. is a running shoe, it would be contrary to the teachings of Kataoka et al. to provide spikes on the heel portion. The Norton reference is also directed to a track shoe which does not include spikes on the heel. Accordingly, the Norton reference fails to make up for the deficiencies of Kataoka et al. with regard to this aspect of the present invention as well.

With regard to dependent claims 2, 3 and 5, Applicant respectfully submits that these claims are allowable due to their dependence upon allowable independent claims 1 and 4, as well as for the additional limitations recited by these claims.

In view of the above amendments and remarks, Applicant respectfully submits that claims 1-5 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103 are respectfully requested.

### **CONCLUSION**

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Paul C. Lewis, Registration No. 43,368 at (703) 205-8000 in the Washington, D.C. area.

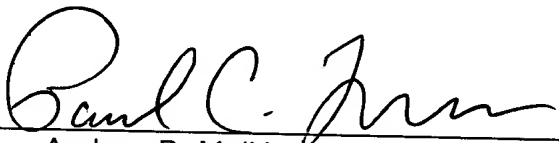
Attached hereto is a marked-up version of the changes made to the application by this Amendment.

Applicant respectfully petitions under the provisions of 37 C.F.R. § 1.136(a) and § 1.17 for a one-month extension of time in which to respond to the Examiner's Office Action. The Extension of Time Fee in the amount of \$110.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By   
Andrew D. Meikle  
for Reg. No. 32,868 43,368

ADM/PCL/cl

P. O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

Attachment: Version with Markings to Show Changes Made

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS**

**The claims have been amended as follows:**

1.(TWICE AMENDED) A shoe, comprising:

an outsole including a projected portion having a ground-contact surface formed thereon, said outsole including a heel portion and a forefoot portion; and  
a plurality of spikes located on the heel portion and the forefoot portion of said outsole, each of said plurality of spikes including a disk shaped portion and a plurality of pins and [spike] having a ground-contact portion made of a molded rubber material having a JIS-C hardness in the range from 35 to 95 and an elongation at break of 280% or more; said molded rubber material contains 30 wt% or more of polybutadiene as a rubber component thereof; the difference (h1-h2) between a projected height h1 of said spike and a projected height h2 of said projected portion is in the range from 0mm to 15mm; and a difference (C1-C2) between a hardness C1 of the ground contact portion of the spike and a hardness C2 of the projected portion measured by JIS-C is in the range from 5-80.

4. (TWICE AMENDED) A shoe, comprising:

an outsole including a projected portion having a ground-contact surface formed thereon, said outsole including a heel portion and a forefoot portion ; and

a plurality of spikes located on the heel portion and the forefoot portion of said outsole, each of said plurality of spikes including a disk shaped portion and a plurality of pins and [spike] having a ground-contact portion made of a molded rubber material having a JIS-C hardness in the range from 35 to 95 and an elongation at break of 280% or more; said molded rubber material contains 30 wt% or more of acrylonitrile-butadiene copolymer as a rubber component thereof; the difference ( $h_1-h_2$ ) between a projected height  $h_1$  of said spike and a projected height  $h_2$  of said projected portion is in the range from 0mm to 15mm; and a difference ( $C_1-C_2$ ) between a hardness  $C_1$  of the ground contact portion of the spike and a hardness  $C_2$  of the projected portion measured by JIS-C is in the range from 5-80.